

Kitty Hawk National Seashore
Kitty Hawk, North Carolina
December 17, 2003

On behalf of the dedicated men and women of NASA who for 45 years have helped take our dreams of flight soaring into the skies and heavens beyond, I am honored to participate in this very special commemoration ceremony.

Today we celebrate the amazing progress the age of air and spaceflight has made possible.

We also look forward with great anticipation to a second century of flight with untold possibilities.

In this setting it is useful to remember, however, that even leading up to the Wright Brothers' triumph, the idea of powered flight was viewed by many experts of the day as an impossible aspiration.

Indeed, eight years before Orville and Wilbur Wright took their home-built flyer to the sandy dunes of Kitty Hawk, cranked up the engine, and took off into the history books, Lord Kelvin, the President of the Royal Society of England made a forceful declaration. "Heavier than air flying machines are impossible," said this very powerful man of science....Rumor has it Lord Kelvin was slightly in error.

Some eighteen years after the Wright Brothers had completed their four flights on that blustery December day, not unlike today, no less an authority than the New York Times editorial page had a few choice words for an obscure Massachusetts professor who dared claim that rockets could fly into outer space. "Professor Goddard does not know the relationship between action and reaction," wrote the Times. "He seems to lack the basic knowledge ladled out daily in high schools." Of course, even the august New York Times has been known to be wrong once in a while.

We gather here at Kitty Hawk to pay tribute to all the pioneers of aviation and space flight, the intrepid men and women who've dared to dream no small dreams, and always have had enough gumption not to let an occasional skeptic or misfire keep them down.

Because of the Wright Brothers and those who followed, the sky and the heavens beyond are no longer our limit, but rather the dramatic setting for today's amazing feats of adventure, exploration and discovery.

At NASA, we are enormously proud that people with names like Alan Shephard, John Glenn, Neil Armstrong, Shannon Lucid and now the heroic crewmembers of the Columbia Space Shuttle STS-107 mission are part of this incredible legacy of flight.

The story of the first flight and of the brothers Wright speaks to the importance of creativity, commitment and perseverance. The days and months that Orville and Wilbur spent tinkering and experimenting here at Kitty Hawk are well documented. What's often overlooked, though, is how this beautiful shoreline and the flying creatures that lived here also served to inspire their creative genius.

Author James Tobin writes how sometimes lifeguards would look over from their posts and see Orville and Wilbur standing near the beach, faces upturned, watching intently as gulls soared and banked overhead, even spreading their arms and twisting their wrists in imitation of these birds.

The brothers spent even more hours watching the eagles, hawks and buzzards that soared some distance inland from the crashing waves, above the dunes from which they flew. The brothers carefully observed how the birds enjoyed a perfect balance among the forces of lift, draft and gravity, a balance they were learning how to emulate with their own human ingenuity.

A few hundred miles from here at Kitty Hawk, on the sandy beaches of Cape Canaveral, Florida, seabirds, hawks and eagles also fly through the air nearby the giant rockets that send our space exploration dreams soaring.

Each time one of NASA's rockets light up with flames of orange, and arcs toward the heavens with a thunderous roar, the startled local bird populations also take flight. It's almost as if they intend to fly alongside these rockets as far as they will go.

Next month, two NASA spacecraft that quickly left those birds behind as they lifted off several months ago will hopefully make soft landings on the sands of Mars. Once there, the Mars Exploration Rovers Spirit and Opportunity will begin an extensive search for evidence of free flowing water in Mars' ancient past.

It's dramatic missions like this that NASA will pursue throughout the second century of flight. On behalf of the American people, we are privileged to pioneer the air and space frontier ever day. We do so to advance our bold mission goals that compel us to understand and protect our home planet, explore the Universe, search for life, and inspire the next generation of explorers, those scientists and engineers, pilots and astronauts who will help carry the torch of exploration to heights unimagined and into frontiers unknown.

In the years ahead, the men and women of NASA will work hard to improve the safety and efficiency of our nation's air transportation system, improve our understanding of Earth's complex climatic system, extend our gaze into the deepest regions of the Universe and expand our reach ever outward with human and robotic explorers.

We are indeed just in the infancy of a great adventure without end. I thank all the air and space pioneers here today for their contributions to this historic quest and for the opportunity to be a part of this historic event.

I also want to thank the Flight Centennial Foundation and the staff of the Wright Brothers National Memorial for allowing NASA to be a part of this celebration. President John F. Kennedy once remarked, "We need men and women who can dream of things that never were." Today I am looking at many people, including our future Orvilles and Wilburs. There is always another dream. There should always be another dreamer. The Wright brothers took human kind into our sky. Let us in turn take human kind into other skies. Keep dreaming. And God bless America.